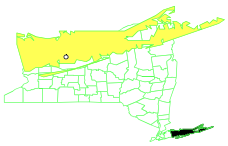
SMS INSTRUMENTS,INC.

NEW YORK

EPA ID# NYD001533165

EPA REGION 2
CONGRESSIONAL DIST. 02
Suffolk County
Deer Park



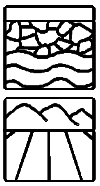
Site Description

SMS Instruments, Inc. is located in a light industrial area in Deer Park. The site consists of a one-story 34,000-square-foot masonry building on 1-1/2 acres. Approximately 80% of the lot is paved with asphalt. From 1971 to 1983, SMS Instruments, Inc. overhauled military aircraft components. Industrial wastes generated from degreasing and other refurbishing operations were discharged to a leaching pool on site. Other sources of contamination included a 6,000-gallon underground storage tank used for jet fuel storage and corroded and leaking drums stored outdoors in an unprotected area. More than 50 industrial facilities are located within a 1-mile radius of the site, and a large groundwater recharge basin is located adjacent to the eastern side of the site. The basin is located in the recharge zone of the Magothy aquifer, a sole source aquifer for Long Island. The Magothy aquifer is the only source of drinking water for the estimated 124,000 residents in the vicinity of the site. Approximately 17,000 residences are located within a mile of the site. Several schools are situated to the south of the site. The headwaters of Sampawams Creek, which feeds into Guggenheim Lakes, lie a mile southeast of the site. Belmont Lake State Park is less than 2 miles to the southwest.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants

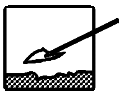


Industrial wastes from the metal degreasing and refurbishing operations caused groundwater to become contaminated with volatile organic compounds (VOCs) including xylene, dichlorobenzene, chlorobenzene, and trichloroethylene. Exposure to contaminated groundwater through direct contact, ingestion or inhalation may pose a health threat. The Suffolk County Department of Health Services has indicated that residents in the vicinity of the site may maintain private wells for irrigation purposes, but not as a source of drinking water. These residences obtain their drinking water from a public water supply. The public water supplies are routinely tested to ensure compliance with state and federal drinking water standards.

Cleanup Approach

The site is being addressed in three stages: an immediate action and two long-term remedial phases focusing on cleanup of the entire site (soils and groundwater). In addition, an investigation of off-site groundwater contamination was also conducted.

Response Action Status



Immediate Actions: The leaching pool was pumped out, filled with sand, and sealed in 1983. The underground jet fuel storage tank was removed in 1988.

Entire Site: In a September 1989 Record of Decision (ROD), EPA selected a remedy for the groundwater and soils at the site. The ROD calls for extracting and treating (air stripping) groundwater and reinjecting it into the ground. This plan has since been revised to allow for treated groundwater to be discharged directly into the recharge basin adjacent to the site; soils were to be treated on-site by in-situ vacuum extraction to remove VOCs. The remedial design for the soil remediation was completed in June 1991. Construction of the soil vapor extraction (SVE) unit was completed in April 1992. The SVE unit operated from April of 1992 to November of 1993, when all soil cleanup levels were achieved. Subsequently, the soil treatment unit was dismantled and removed. The design of the groundwater remediation system was completed in September 1992 and construction of the treatment plant was completed in June 1994. The system has been in operation since that time and is producing groundwater effluent contaminant concentrations well below the required discharge levels. The unit has a capacity of 105 gallons per minute (gpm). The groundwater treatment unit will continue to operate until cleanup levels as specified in the ROD are achieved.

Off-Site Contamination: In May 1990, the EPA began an investigation to determine the nature and extent of groundwater contamination upgradient of the site. The field work was completed in December 1992. The study indicated that there were no upgradient off-site sources which affected the contamination at the site. A "No Action" Record of Decision for off-site groundwater contamination was signed on September 27, 1993.

Cleanup Progress

A 6,000-gallon jet fuel under ground tank which failed a pressure test was removed in early 1988 by the owner at EPA's request.

An SVE unit operated from April 1992 to November 1993 when soil action levels, as specified in the ROD, were achieved. Approximately 50,000 tons of contaminated soil were remediated. A groundwater extraction and treatment unit has been operating since June 1994. The unit has a groundwater circulating capacity of 105 gallons per minute (gpm). To date, approximately 330 million gallons of groundwater have been processed. EPA determined that all construction activities were completed at the site on January 31, 1996.

EPA completed the second "Five Year Review" in May, 2001. The Five Year Review concluded that the selected remedy remains protective of human health and the environment and that the remedy is functioning as designed. The next Five Year Review will be conducted by May, 2006.